

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Yoshihiko HIBINO et al. :

Serial No. 09/673,567 : Group Art Unit: 1774

Filed: October 18, 2000 : Examiner: P. R. Schwartz

For: INK JET RECORDING :

PAPER

DECLARATION

Assistant Commissioner for Patents Washington, D. C. 20231

Sir:

I, Koji IDEI, declare that I am one of the coinventors of the above-identified application and
familiar with the prosecution history of the present
application.

I declare that I have read and understand the official action dated October 23, 2002 issued against the above-identified application and also the references cited in the official action.

I declare that I have carried out the following experiment in order to demonstrate the patentability of the present invention.

All "part" and "%" used below are by weight.

1. Preparation of samples

(1) Sample A

Example 1 of Koide et al. (U.S. Patent No. 5,756,151) was followed up as described below.

A base paper having a basis weight of 78.4 g/m² was made in accordance with the following paper formulation by use of a Fourdrinier paper machine.

Though a yield improving agent was not used in Koide, it was hard to make a base paper without using it.

Therefore, the yield improving agent was used.

<Base paper formulation>

	Part
Pulp; LBKP (Freeness; 450 ml,c.s.f)	100
Calcium carbonate (TP-121 manufactured by	
Okutama Kogyo Co., Ltd.)	10
Amphoteric starch (Cato 3210 manufactured	
by Japan NSC Co., Ltd.)	3.2
Neutral rosin sizing agent (CC-167	
manufactured by Japan PMC Co., Ltd.)	0.2
Yield improving agent (Parcol 57 manufac-	
tured by Allied Colloid Co. Ltd.)	0.02

The base paper made above was subjected to size press with a size press solution of the following formulation to obtain sample A. The amount of the blue fluorescent dye adhered to the base paper was 0.1% based on the weight of the base paper.

<Formulation of size press solution>

Oxidized starch (MS3800 manufactured by
Nippon Shokuhin Kako Co., Ltd.)

Blue fluorescent dye (Mikephor BN conc
manufactured by Mitsui Toatsu Chemicals Inc.)

0.2

(2) Sample B

The same procedure as in Example 1 of the present application was repeated to obtain sample B.

3. Evaluation

As to samples A and B obtained above, ISO brightness, fluorescence intensity, image density, water resistance and image reproducibility were evaluated in the same manner as described in the present specification. The results are shown in Table I.

Table I

	ISO	Fluoresc	Image	Water	Image
	bright-	ent	- den-	resist-	repro-
	ness	inten-	sity	ance	ducibil-
	(%)	sity			ity
		(%)			
Sample	89.9	3.2	1.08	D	D
A					
Sample	98.8	8.1	1.35	A	A
В					

As seen from the above, sample A (Koide) is inferior to sample B (present invention) in all of ISO brightness, fluorescence intensity, image density, water resistance and image reproducibility, and hence is unsuitable for an ink jet recording paper.

The undersigned declarant declares further that all statements made herein of own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed this 14th day of February 2003.

Koji IDEI